

ABSTRACT OF THE DISCLOSURE

Provided is a semiconductor device having a semiconductor resistance element, which is capable of suppressing a variation in characteristics of the semiconductor resistance element due to an acceptor concentration difficult to be controlled, thereby stably improving the yield of a semiconductor integrated circuit using the semiconductor device. The device includes an n-type semiconductor resistance region formed in the surface of a compound semiconductor substrate, and a p-type buried region formed between the n-type semiconductor resistance region and a substrate region 21S of the compound semiconductor substrate. An acceptor of the p-type buried region is set to be higher than an acceptor concentration in the substrate region and lower than a donor concentration in the n-type semiconductor resistance region, whereby the effect of the acceptor concentration in the substrate on the semiconductor resistance region can be avoided.